4.2.A. 0601010401.

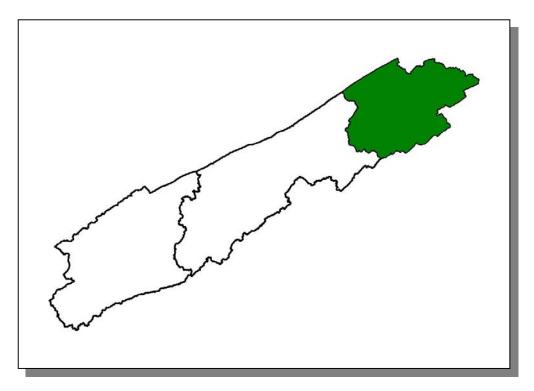


Figure 4-2. Location of Subwatershed 0601010401. All Holston River HUC-10 subwatershed boundaries are shown for reference.

4.2.A.i. 060101040101 (Holston River).

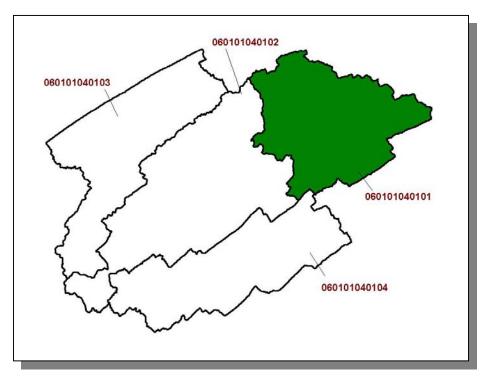


Figure 4-3. Location of Subwatershed 060101040101. All HUC-12 subwatershed boundaries are shown for reference.

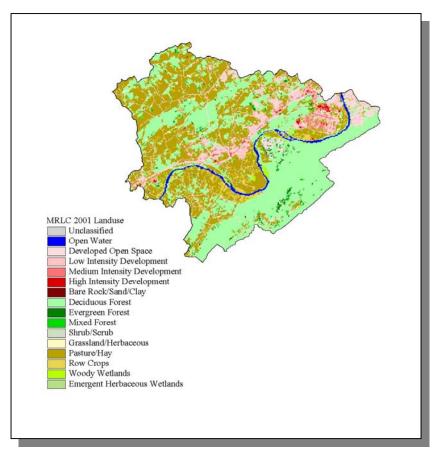


Figure 4-4. Illustration of Land Use Distribution in Subwatershed 060101040101.

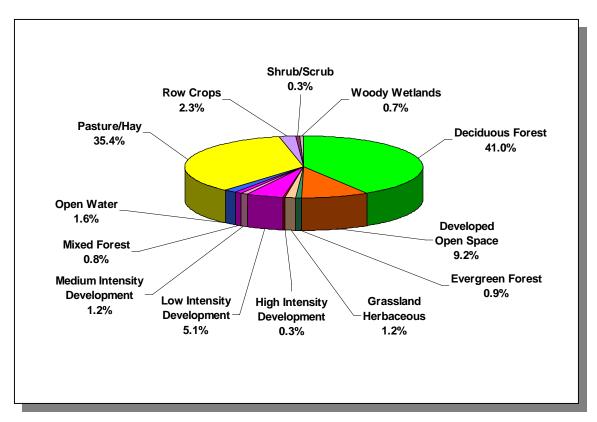


Figure 4-5. Land Use Distribution in Subwatershed 060101040101. More information is provided in Appendix IV.

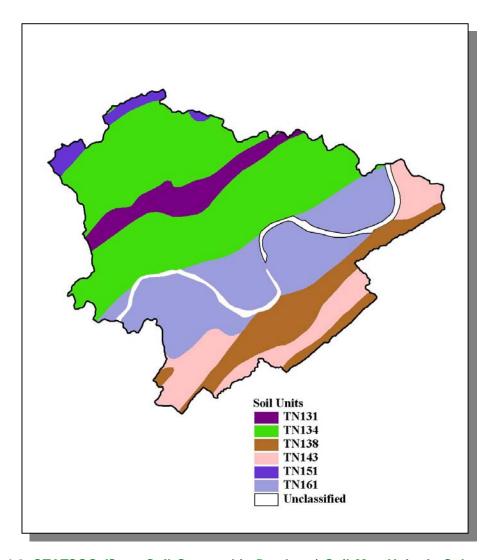


Figure 4-6. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040101.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN131	0.00	С	1.17	4.95	Silty Loam	0.33
TN134	0.00	В	1.38	5.18	Loam	0.31
TN138	0.00	С	2.48	4.26	Sandy Loam	0.22
TN143	0.00	С	1.22	6.44	Loam	0.32
TN151	0.00	С	2.88	4.75	Loam	0.40
TN161	7.00	C	1.41	5.11	Loam	0.31

Table 4-2. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040101. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION			POPULATION IN WATERSHED						
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)		
Hawkins	44,565	48,821	53,563	10.54	4,696	5,145	5,645	20.2		
Sullivan	143,596	150,371	153,048	0.64	923	966	984	6.6		
Total	188,161	199,192	206,611		5,619	6,111	6,629	18.0		

Table 4-3. Population Estimates in Subwatershed 060101040101.

				NUMBER OF HOUSING UNITS					
Populated Place County		Population	Total	Public Sewer	Septic Tank	Other			
Church Hill	Hawkins	4,834	2,004	1,558	429	17			
Kingsport	Hawkins	36,408	16,738	14,810	1,903	25			
Mount Carmel Hawkins		4,039	1,634	1,077	557	0			
Total		45,281	20,736	17,445	2,889	42			

Table 4-4. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060101040101.

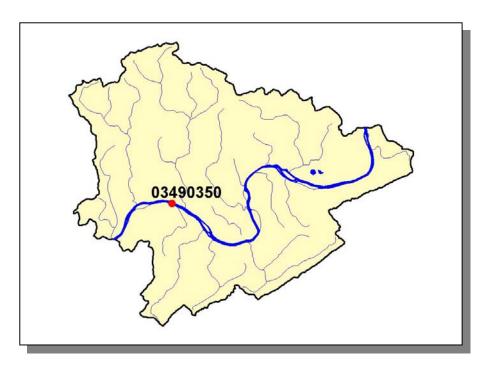


Figure 4-7. Location of Historical Streamflow Data Collection Sites in Subwatershed 060101040101. More information is provided in Appendix IV.

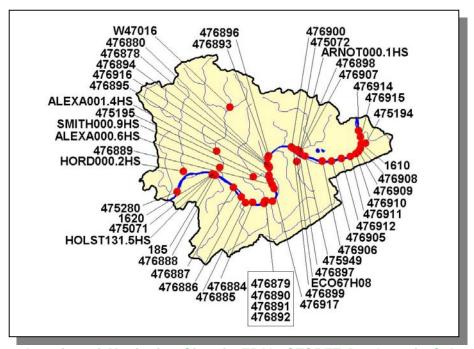


Figure 4-8. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060101040101. More information, including site names and locations, is provided in Appendix IV.

4.2.A.i.a. Point Source Contributions.

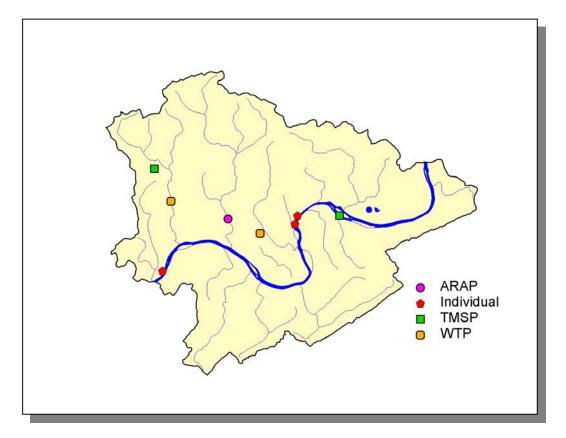


Figure 4-9. Location of Permits Issued in Subwatershed 060101040101. More information, including the names of facilities, is provided in Appendix IV.

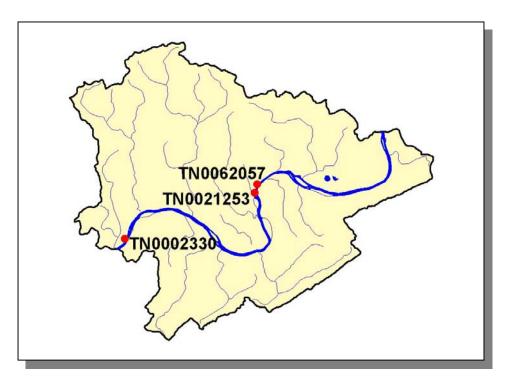


Figure 4-10. Location of Active NPDES Sites in Subwatershed 060101040101. More information, including the names of facilities, is provided in Appendix IV.

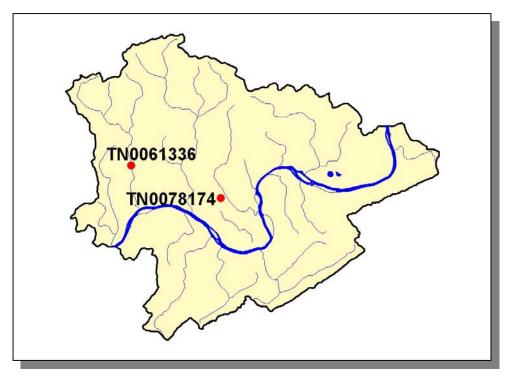


Figure 4-11. Location of Water Treatment Plants in Subwatershed 060101040101. More information, including the names of facilities, is provided in Appendix IV.

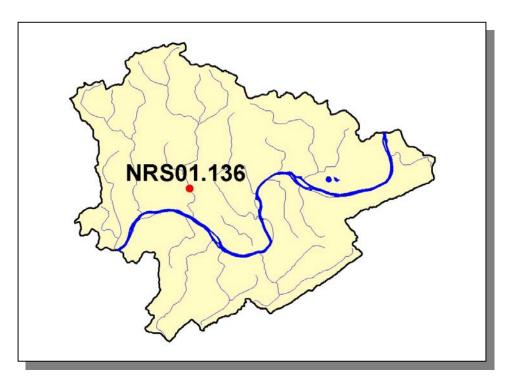


Figure 4-12. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 060101040101. More information is provided in Appendix IV.

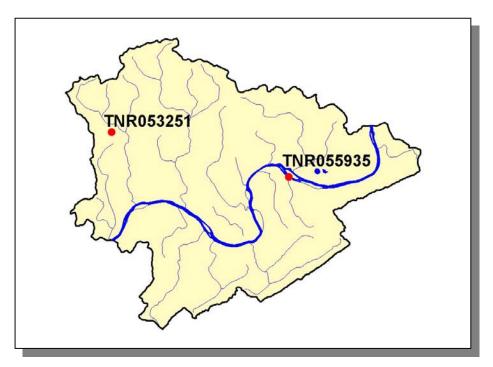


Figure 4-13. Location of TMSP Sites in Subwatershed 060101040101. More information, including the names of facilities, is provided in Appendix IV.

There is one NPDES facility discharging to water bodies listed on the 2004 303(d) list in Subwatershed 060101040101:

 TN0078174 (1st Utility District Hawkins County WTP) discharges to Alexander Creek @ RM 0.2

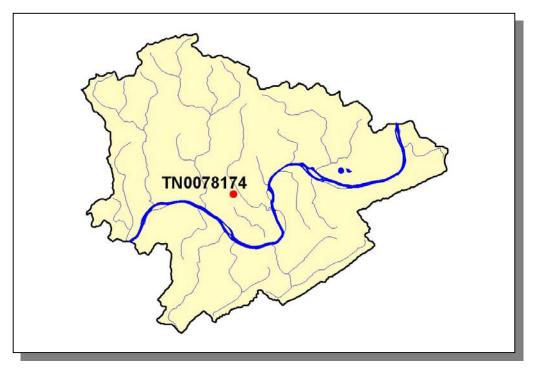


Figure 4-14. Location of NPDES Dischargers to Water Bodies Listed on the 2004 303(d) List in Subwatershed 060101040101. More information, including the names of facilities, is provided in Appendix IV.

PERMIT #	1Q10	3Q10	7Q10	3Q20	QDESIGN
TN00078174					

Table 4-5. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 060101040101. Data are in million gallons per day (MGD). Data were obtained from the USGS publication Flow Duration and Low Flows of Tennessee Streams Through 1992 or from permit files.

PERMIT #	HARDNESS
TN0078174	X

Table 4-6. Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 060101040101.

				SETTLEABLE	
PERMIT #	NO ₃	TRC	TSS	SOLIDS	ΑI
TN0078174	Χ	Χ	Х	Χ	Χ

Table 4-7. Parameters Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 0601010401. WET, Whole Effluent Toxicity; CBOD₅, Carbonaceous Biochemical Oxygen Demand (5-Day); TRC, Total Residual Chlorine; TSS, Total Suspended Solids.

4.2.A.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS										
Beef Cow Cattle Milk Cow Chickens (Layers) Hogs Sheep										
2,125	4,142	105	7	49	27					

Table 4-8. Summary of Livestock Count Estimates in Subwatershed 060101040101. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	LIVESTOCK COUNTS											
County Beef Cow Cattle Milk Cow Chickens (Layers) Hogs She												
Hawkins	18,796	36,429	903	1,079	442	243						
Sullivan	13,322	29,386	1,075	594	104	69						

Table 4-9. Summary of Livestock Count Estimates in Sullivan and Hawkins Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Hawkins	177.4	177.4	0.4	2.1	
Sullivan	123.7	123.7	0.1	0.3	

Table 4-10. Forest Acreage and Annual Removal Rates (1987-1994) in Hawkins and Sullivan Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.32
Grass (Hayland)	0.55
Legumes, Grass (Hayland)	0.39
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	0.59
Corn (Row Crops)	8.20
Tobacco (Row Crops)	15.76
Other Vegetable and Truck Crops	33.50
Other Land in Farms	0.02
Farmsteads and Ranch Headquarters	0.40

Table 4-11. Annual Estimated Total Soil Loss in Subwatershed 060101040101.

4.2.A.ii. 060101040102 (Holston River).

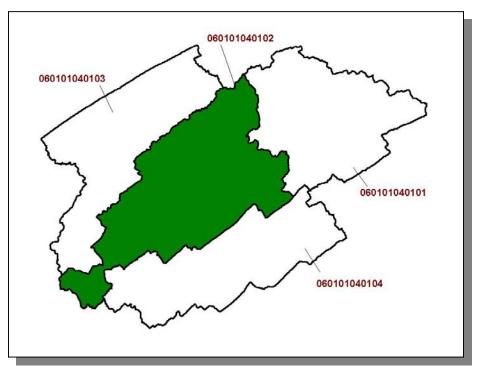


Figure 4-15. Location of Subwatershed 060101040102. All HUC-12 subwatershed boundaries are shown for reference.

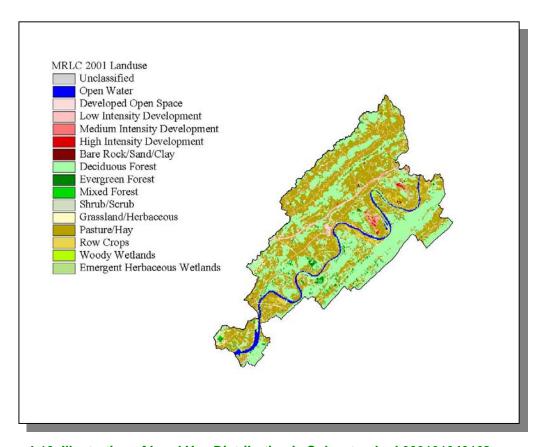


Figure 4-16. Illustration of Land Use Distribution in Subwatershed 060101040102.

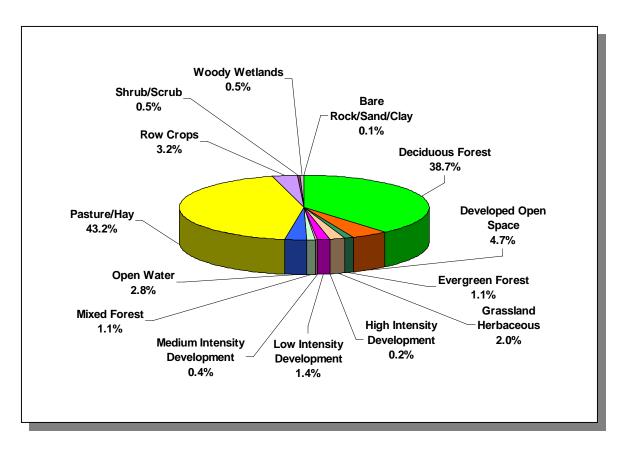


Figure 4-17. Land Use Distribution in Subwatershed 060101040102. More information is provided in Appendix IV.

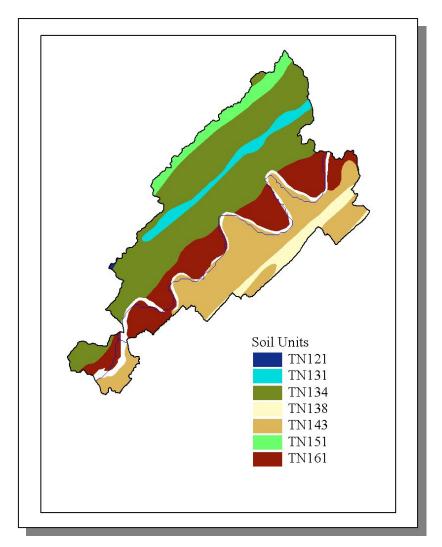


Figure 4-18. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040102.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN121	0.00	В	1.30	5.21	Loam	0.33
TN131	0.00	С	1.17	4.95	Silty Loam	0.33
TN134	0.00	В	1.38	5.18	Loam	0.31
TN138	0.00	С	2.48	4.26	Sandy Loam	0.22
TN143	0.00	С	1.22	6.44	Loam	0.32
TN151	0.00	С	2.88	4.75	Loam	0.40
TN161	7.00	С	1.41	5.11	Loam	0.31

Table 4-12. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040102. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION					NATED PC	PULATION SHED	
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Hawkins	44,565	48,821	53,563	15.12	6,737	7,380	8,097	20.2

Table 4-13. Population Estimates in Subwatershed 060101040102.

	_			NUMBER OF HO	USING UNITS	
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Church Hill	Hawkins	4,834	2,004	1,558	429	17
Surgoinsville	Hawkins	1,499	625	38	553	34
Total		6,333	2,629	1,596	982	51

Table 4-14. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060101040102.

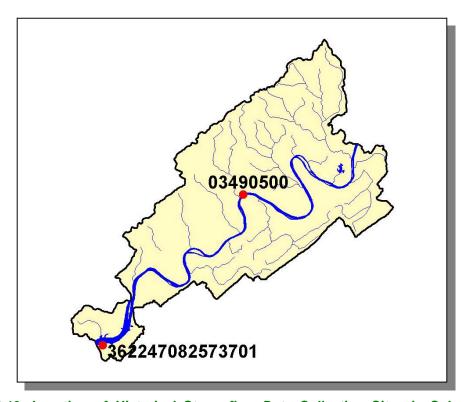


Figure 4-19. Location of Historical Streamflow Data Collection Sites in Subwatershed 060101040102. More information is provided in Appendix IV.

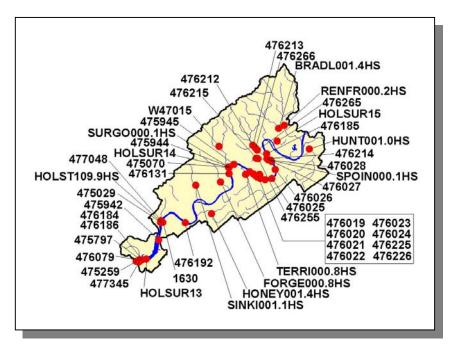


Figure 4-20. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060101040102. More information, including site names and locations, is provided in Appendix IV.

4.2.A.ii.a. Point Source Contributions.

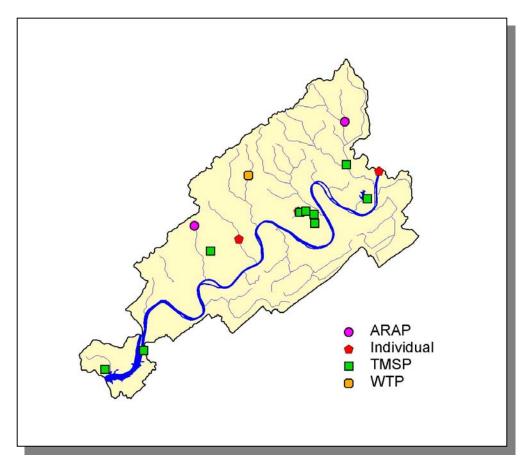


Figure 4-21. Location of Permits Issued in Subwatershed 060101040102. More information, including the names of facilities, is provided in Appendix IV.

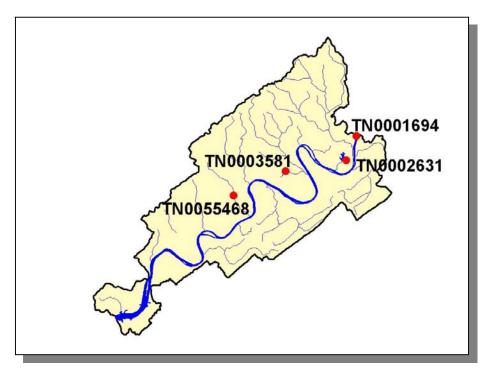


Figure 4-22. Location of Active NPDES Sites in Subwatershed 060101040102. More information, including the names of facilities, is provided in Appendix IV.

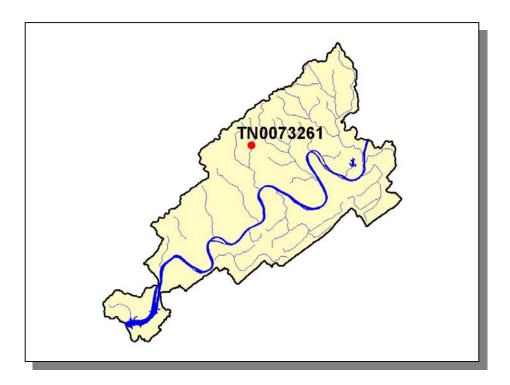


Figure 4-23. Location of Water Treatment Plants in Subwatershed 060101040102. More information, including the names of facilities, is provided in Appendix IV.

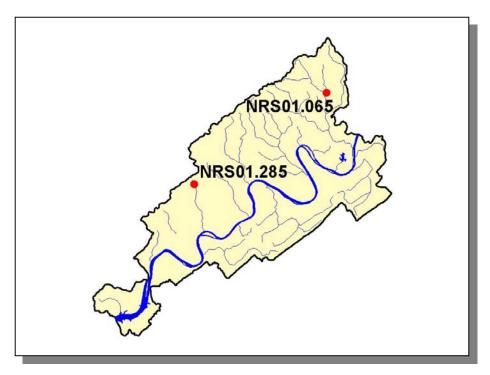


Figure 4-24. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 060101040102. More information is provided in Appendix IV.

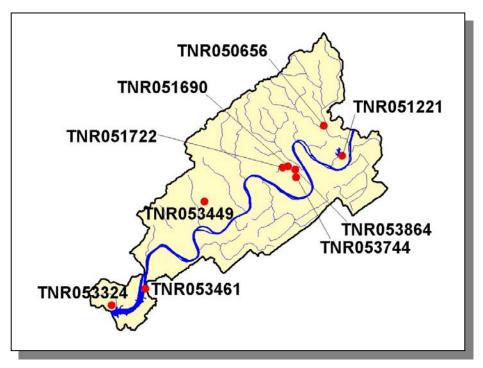


Figure 4-25. Location of TMSP Sites in Subwatershed 060101040102. More information, including the names of facilities, is provided in Appendix IV.

4.2.A.ii.a.i. Dischargers to Water Bodies Listed on the 2004 303(d) List

There are five NPDES facilities discharging to water bodies listed on the 2004 303(d) list in Subwatershed 060101040102:

- TN0001694 (Quebecor World) discharges to an unnamed tributary to Bradley Creek @ RM 1.4
- TN0003581 (Alladin Investments, Inc. (discharges to an unnamed tributary
 @ RM 0.08 to Stoney Point Creek @ RM 0.2
- TN0055468 (Surgoinsville Middle and Elementary Schools) discharges to Forgey Creek @ RM 1.4
- TN0073261 (Surgoinsville Utility District WTP) discharges to Young Branch, Surgoinsville Creek, and the Holston River @ RM 118.5
- TN0078174 (1st Utility District Hawkins County WTP) discharges to Alexander Creek @ RM 0.2

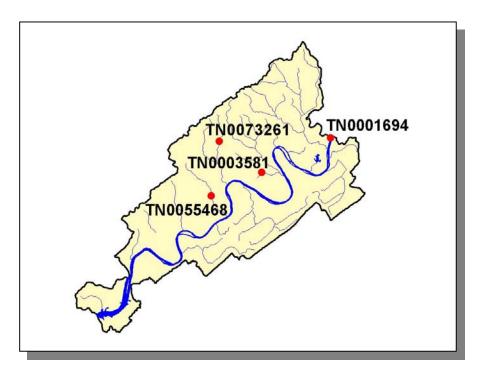


Figure 4-26. Location of NPDES Dischargers to Water Bodies Listed on the 2004 303(d) List in Subwatershed 060101040102. More information, including the names of facilities, is provided in Appendix IV.

PERMIT #	1Q10	3Q10	7Q10	3Q20	QDESIGN
TN0001694					
TN0003581					
TN0055468			0		

Table 4-15. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 060101040102. Data are in million gallons per day (MGD). Data were obtained from the USGS publication <u>Flow Duration and Low Flows of</u>
Tennessee Streams Through 1992 or from permit files.

PERMIT#	FLOW	TEMP	HARDNESS	COLOR	FOAM	FLOATING MATERIAL	OIL SHEEN
TN0001694	Χ	Χ					
TN0003581	Χ	Χ		Χ	Χ	Х	Χ
TN0055468	Χ						
TN0073261	Х						
TN0078174			Х				

Table 4-16. Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 060101040102.

PERMIT #	ETHYLBENZENE	BENZENE	METHYLETHYLKETONE	ACETONE	TOLUENE
TN0001694	X	X	X	Χ	Χ

Table 4-17. Monitoring Requirements for Organic Parameters for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 060101040102.

							SETTLEABLE			OIL and	
PERMIT #	WET	CBOD ₅	NH ₃	NO ₃	TRC	TSS	SOLIDS	DO	рН	GREASE	ΑI
TN0001694	X	Χ			Х	Χ	X				
TN0003581	Х	Χ	Х		Х	Х	X	Х	Х	Х	
TN0055468		Х			Х	Х	Х	Х	Х		
TN0073261					Х	Х	X		Х		Х
TN0078174				Х	Х	Х	Х				Χ

Table 4-18. Parameters Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 060101040102. WET, Whole Effluent Toxicity; CBOD₅, Carbonaceous Biochemical Oxygen Demand (5-Day); TRC, Total Residual Chlorine; TSS, Total Suspended Solids.

PERMIT #	E. coli	FECAL COLIFORM
TN0003581		X
TN0055468	Χ	X

Table 4-19. Bacteria Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 060101040102.

4.2.A.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS							
Beef Cow Cattle Milk Cow Chickens (Layers) Hogs Sheep							
3,959	7,673	190	13	93	51		

Table 4-20. Summary of Livestock Count Estimates in Subwatershed 060101040102. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS								
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep		
Hawkins	18,796	36,429	903	1,079	442	243		

Table 4-21. Summary of Livestock Count Estimates in Hawkins County. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	(thousand acres) (thousand acres)		(million cubic feet)	(million board feet)	
Hawkins	177.4	177.4	0.4	2.1	

Table 4-22. Forest Acreage and Annual Removal Rates (1987-1994) in Hawkins County

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.26
Grass (Hayland)	0.56
Legumes, Grass (Hayland)	0.40
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	0.54
Tobacco (Row Crops)	16.40
Other Vegetable and Truck Crops	33.50
Farmsteads and Ranch Headquarters	0.40

Table 4-23. Annual Estimated Total Soil Loss in Subwatershed 060101040102.

4.2.A.iii. 060101040103 (Big Creek).

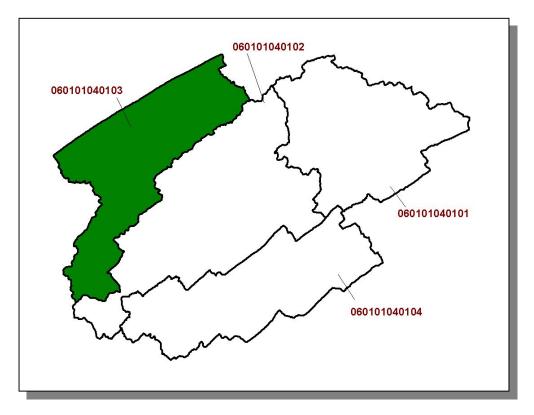


Figure 4-27. Location of Subwatershed 060101040103. All HUC-12 subwatershed boundaries are shown for reference.

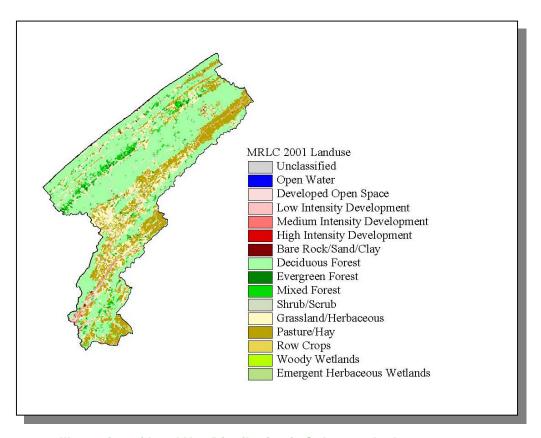


Figure 4-28. Illustration of Land Use Distribution in Subwatershed 060101040103.

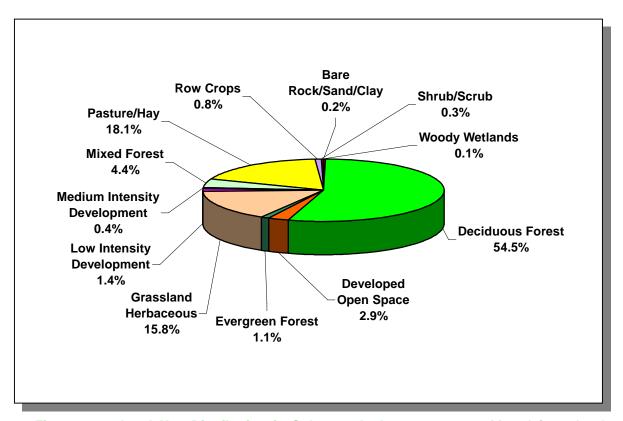


Figure 4-29. Land Use Distribution in Subwatershed 060101040103. More information is provided in Appendix IV.

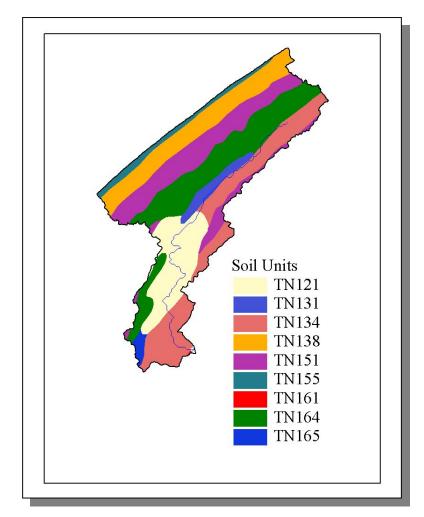


Figure 4-30. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040103.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN121	0.00	В	1.30	5.21	Loam	0.33
TN131	0.00	С	1.17	4.95	Silty Loam	0.33
TN134	0.00	В	1.38	5.18	Loam	0.31
TN138	0.00	С	2.48	4.26	Sandy Loam	0.22
TN151	0.00	С	2.88	4.75	Loam	0.40
TN155	0.00	С	1.71	5.31	Loam	0.32
TN161	7.00	С	1.41	5.11	Loam	0.31
TN164	0.00	С	4.48	5.15	Loam	0.25
TN165	0.00	В	4.79	5.51	Silty Loam	0.32

Table 4-24. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040103. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION					IATED PO N WATER	PULATION SHED	
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Hancock	6,739	6,801	6,786	0.11	7	7	7	0.0
Hawkins	44,565	48,821	53,563	10.92	4,867	5,332	5,849	20.2
Total	51,304	55,622	60,349		4,874	5,339	5,856	20.1

Table 4-25. Population Estimates in Subwatershed 060101040103.

				NUMBER OF HO	USING UNITS	
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Rogersville	Hawkins	4,149	1,995	1,833	133	29

Table 4-26. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060101040103.

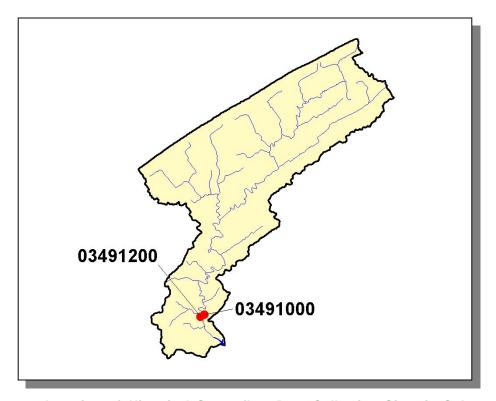


Figure 4-31. Location of Historical Streamflow Data Collection Sites in Subwatershed 060101040103. More information is provided in Appendix IV.

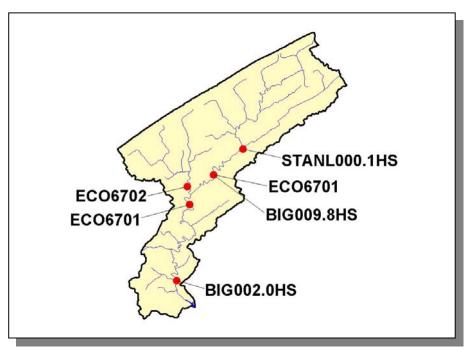


Figure 4-32. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060101040103. More information, including site names and locations, is provided in Appendix IV.

4.2.A.iii.a. Point Source Contributions.

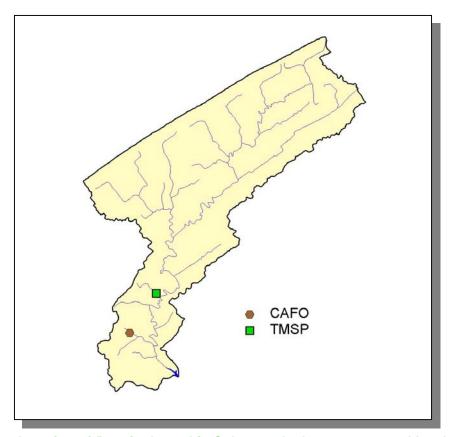


Figure 4-33. Location of Permits Issued in Subwatershed 060101040103. More information, including the names of facilities, is provided in Appendix IV.

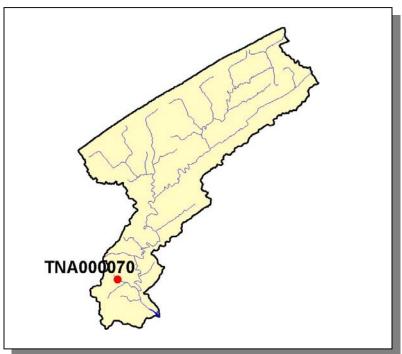


Figure 4-34. Location of Concentrated Animal Feeding Operations (CAFO) in Subwatershed 060101040103. More information, including the names of facilities, is provided in Appendix IV.

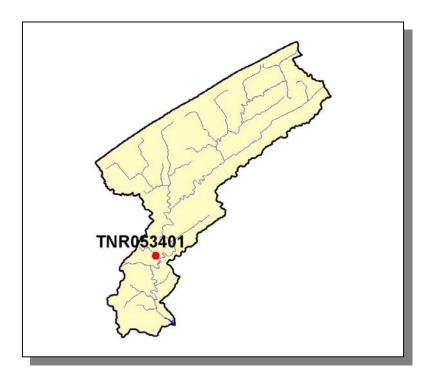


Figure 4-35. Location of TMSP Sites in Subwatershed 060101040103. More information, including the names of facilities, is provided in Appendix IV.

4.2.A.iii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS						
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep	
2,153	4,172	103	7	51	28	

Table 4-27. Summary of Livestock Count Estimates in Subwatershed 060101040103. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS							
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep	
Hancock	7,079	14,311	89	364	0	67	
Hawkins	18,796	36,429	903	1,079	442	243	

Table 4-28. Summary of Livestock Count Estimates in Hancock and Hawkins Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land	Timber Land	Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Hancock	92.9	92.9	2.7	14.2	
Hawkins	177.4	177.4	0.4	2.1	

Table 4-29. Forest Acreage and Annual Removal Rates (1987-1994) in Hancock and Hawkins Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.27
Grass (Hayland)	0.56
Legumes, Grass (Hayland)	0.40
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	0.54
Corn (Row Crops)	2.42
Tobacco (Row Crops)	16.43
Other Vegetable and Truck Crops	33.50
Farmsteads and Ranch Headquarters	0.40

Table 4-30. Annual Estimated Total Soil Loss in Subwatershed 060101040103.

4.2.A.iv. 060101040104 (Beech Creek).

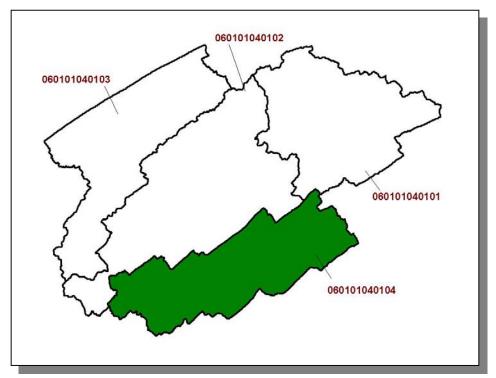


Figure 4-36. Location of Subwatershed 060101040104. All HUC-12 subwatershed boundaries are shown for reference.

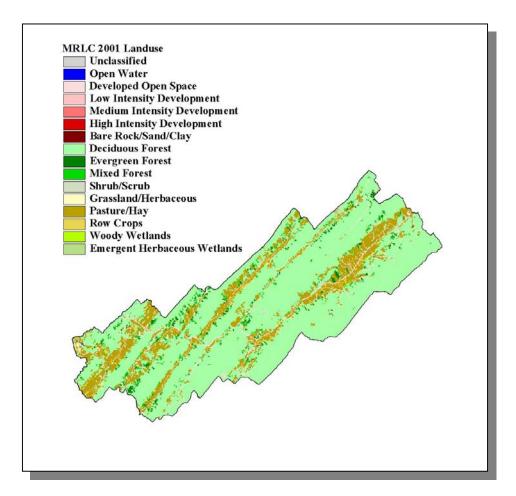


Figure 4-37. Illustration of Land Use Distribution in Subwatershed 060101040104.

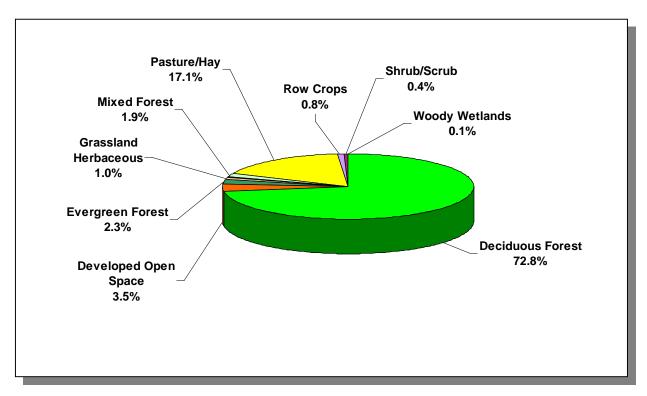


Figure 4-38. Land Use Distribution in Subwatershed 060101040104. More information is provided in Appendix IV.

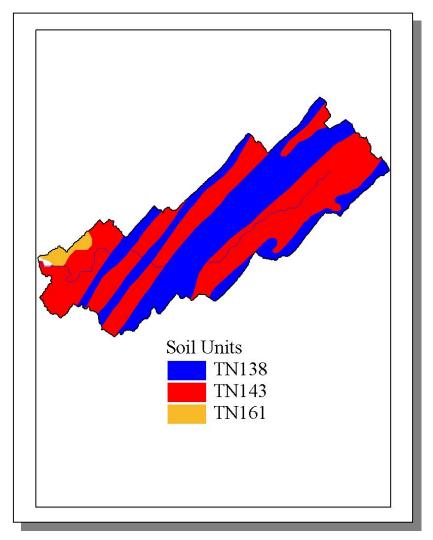


Figure 4-39. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040104.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN138	0.00	С	2.48	4.26	Sandy Loam	0.22
TN143	0.00	С	1.22	6.44	Loam	0.32
TN161	7.00	С	1.41	5.11	Loam	0.31

Table 4-31. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060101040104. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Greene	55,853	59,369	62,009	0.23	128	136	144	12.5
Hawkins	44,565	48,821	53,563	10.14	4,520	4,952	5,432	20.2
Sullivan	143,596	150,371	153,048	0.11	165	173	176	6.7
Washington	92,315	101,136	107,198	0.11	103	113	119	15.5
Total	336,329	359,929	376,718		4,916	5,374	5,871	19.4

Table 4-32. Population Estimates in Subwatershed 060101040104.

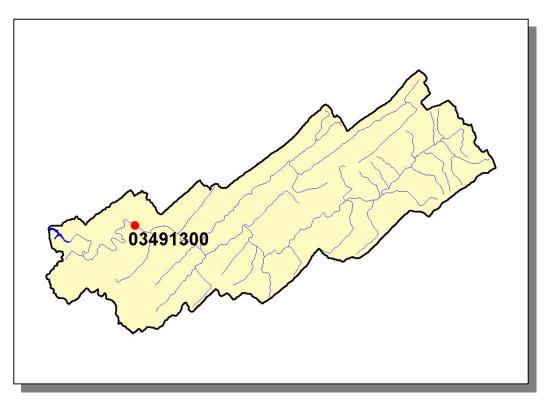


Figure 4-40. Location of Historical Streamflow Data Collection Sites in Subwatershed 060101040104. More information is provided in Appendix IV.

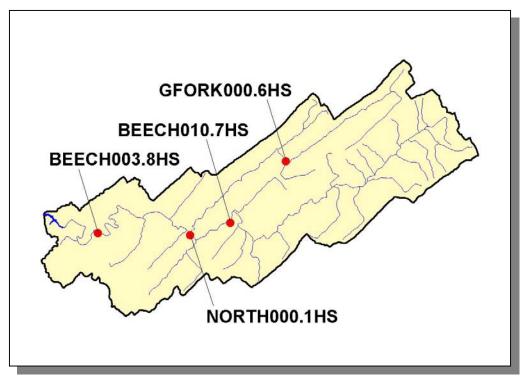


Figure 4-41. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060101040104. More information, including site names and locations, is provided in Appendix IV.

4.2.A.iv.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.A.iv.b. Nonpoint Source Contributions.

	LIVESTOCK (COUNTS)							
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep		
971	1,897	49	3	262	22	12		

Table 4-33. Summary of Livestock Count Estimates in Subwatershed 060101040104. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

			LIV	ESTOCK COUNTS			
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep
Greene	33,962	72,582	7,282	1,190	4,908,815	495	226
Hawkins	18,796	36,429	903	1,079	0	442	243
Sullivan	13,322	29,386	1,075	594	0	104	69
Washington	23,073	53,186	5,190	38	0	262	353

Table 4-34. Summary of Livestock Count Estimates in Greene, Hawkins, Sullivan, and Washington Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	NTORY	REMOVAL RATE		
County	Forest Land Timber Land (thousand acres)		Growing Stock (million cubic feet)	Sawtimber (million board feet)	
Greene	180.0	171.8	2.0	10.5	
Hawkins	177.4	177.4	0.4	2.1	
Sullivan	123.7	123.7	0.1	0.3	
Washington	54.8	50.3	0.3	0.2	

Table 4-35. Forest Acreage and Annual Removal Rates (1987-1994) in Greene, Hawkins, Sullivan, and Washington Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.28
Grass (Hayland)	0.55
Legumes, Grass (Hayland)	0.39
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	0.55
Corn (Row Crops)	14.40
Tobacco (Row Crops)	16.18
Other Vegetable and Truck Crops	32.68
Other Land in Farms	0.02
Farmsteads and Ranch Headquarters	0.44

Table 4-36. Annual Estimated Total Soil Loss in Subwatershed 060101040104.